

# **Institutional design of statistical systems: credibility and relevance<sup>1</sup>**

Simon Schwartzman

(Former President, Brazilian Institute for Geography and Statistics – IBGE, 1994-1998)

Public statistical agencies sit at the edge of different and not always compatible worlds:

- The world of scientific research institutions, according to which data should be collected, analyzed and presented according to the best practices in the field, which includes transparency in the process of data collection and in the error estimates associated with statistical probability; and in which data collection and analysis are often performed by different institutions, with results which are not always the same.
- The world of government and civil service, in which the agency should respond to the policy needs of decision makers in different spheres.
- The world of public opinion – statistical data on employment, education and social inequality are widely published, commented in the press, and help to bolster or weaken the public image of governments. They are also used by international agencies in their rankings, affecting the country's international stand, with all kinds of consequences.
- The world of business – statistical data on prices, inflation, production, employment, income levels and others affect the expectations of business agents in different ways, and can stimulate or depress the economy.
- The world of legal entitlements – population figures determine the distribution of tax revenues to municipalities, poverty levels determine the participation in

---

<sup>1</sup> Note prepared for the International Conference on “Using statistics for broad-based development: challenges for Latin America and the Caribbean”, jointly sponsored by IDB and PARIS21, Washington, DC, September, 2006.

poverty compensation programs, inflation indexes can affect the value of contracts, and so forth.

It is easy to see how these different worlds, or constituencies of public statistical institutions, can have different and often contradictory demands on the agencies. Governments do not like to publish unpleasant data; public opinion requires simple figures, without concern about issues such as error estimates or complex conceptual definitions; statistical figures that generate entitlements difficult to change and to improve, since it can impact the interests of stakeholders of different kinds.

This multiplicity of roles and stakeholders tell us not only about the institutional difficulties of statistical agencies, but also about their growing relevance. In the past, statistical data were collected just to inform the government; today, governments are just one user, among many others, of the data provided by statistical agencies.

The issue, then, is, how to respond with credibility to all these different stakeholders, and remain relevant? From my experience with the Brazilian Statistical Office, I think that there are a few simple answers, which are, however, not easy to implement:

- a) Scientific credibility. Statistical agencies should work according to the best practices of statistical, social and economic analysis, and should be known as doing it. For this, it should have high quality specialists; maintain an active program of research and publications; and interact continuously with the academic community, providing them with data and technical information about their quality and limitations. Other stakeholders may not be able to assess the quality and reliability of the data being provided by the statistical agency, but they can see if the agency works in isolation, or as part of a lively and respected scientific community of specialists.

IBGE, in Brazil, has tried to strengthen its scientific credibility in different ways, such as:

- Increasing the academic standard of its teaching branch, the Escola Nacional de Ciencias Estatísticas – ENCE – into graduate-level institution;
- Transforming its in-house publications – two journals, one in Geography, another in Statistics, as well as the book collection – into referee-based sources, in partnership with scientific societies and members of the scientific community.
- Organizing academic events – the National Conferences on Geography and Statistics -to present and discuss its methodologies and results with stakeholders and members of the scientific community;
- Creating external consulting bodies to assess and help with the decisions regarding the main statistical series – starting with the decennial census – and major changes in methodology affecting areas such as employment, national accounts and price indexes.

One important limitation, however, has been the inability to keep a permanent body of highly qualified researchers working with independence within the institute, for the lack of competitive salaries and institutional flexibility.

b) Institutional autonomy. Statistical agencies cannot function well under the principle that its authorities are political appointees that can be dismissed at will if a minister does not like its data. In practice, there is a high price for a government to interfere in a statistical agency, if, for instance, it publish something the government does not like, since this would create a serious problem of credibility for the good news as well. But there are other forms of interference, such as curtailing some research lines, requiring studies that may be distorted in their formulation, and so forth. Ideally, the authorities of statistical offices should be nominated with approval of the Senate, and work under the supervision of a strong and autonomous board, with well-defined budgets not subject to tampering by the government's budget administration.

In Brazil, it has been so far impossible to for the statistical agency to reach this level of institutional autonomy. The President of the Institute is chosen by the Ministry of Planning, nominated by the President of the Republic, and can be dismissed at will; the directors and chief officers are chosen by the Institute's President, but vetted and appointed by the Minister. The freedom the President of the Institute has to chose his close collaborators depends entirely on the whims of the Planning Minister. In my own experience, there was never any political interference in the choice of the directors and top administrators of the Institute, but there is no formal obstacle to that.

c) Public image. Statistical offices should work constantly with the press to explain what they do, and the meaning of the information they provide. They should provide easily accessible information to the public through the Internet and with different kinds of publication; they should be able to respond readily to enquiries of different kinds of users of their data. Some steps in this direction taken by IBGE in recent years include:

- The creation of a content-rich website, from which the public can have access to main statistical information, download tables and software, and buy different kinds of publications;
- The dissemination of the micro-data from the main statistical basis, among which the yearly National Household Survey – PNAD – and Census sample.
- The definition of a calendar for the publication of the main statistical data, so as to avoid speculations about time manipulation;
- Clear rules for the disclosure of statistical information.

Two issues have threatened at times the public image of IBGE. The first is the instability created either by periodical shortage of resources, or by strikes by the institutes employees. A statistical institute must work with a well-defined and rigid calendar, and needs a stable and predictable budget for its operations; and the salaries and working conditions of its employees should be adequate. Unfortunately, sometimes these

conditions are not met, leading to interruptions in data collection and publication, jeopardizing the institute's public image.

This second is related to the anticipated knowledge government officials and ministers should have of sensitive data. I believe it is reasonable to provide government authorities with anticipated information, so that they can be prepared and react properly to the eventual impact of this information; but government officers should not be allowed to interfere with the dissemination of results, or not give the impression that they are doing it. In the Brazilian recent experience, the sudden introduction of new rules for anticipated information, following the publication of unfavorable data for the government, raised a public suspicion of interference and data manipulation which was harmful for the institute.

A key proposal to increase the credibility and autonomy of the statistical agency is the establishment of a strong national statistical commission which could work as a buffer between the agency and the government, filtering the requests for special studies, approving eventual shifts in methodology, and conveying to the government the institution's needs. Today, IBGE has a consulting body, with representatives of different sectors in government and the academic community. but it has no decision power, and only functions at the request of the Institute's President.

If the agencies are credible, autonomous and with strong links with the public, then they can provide society with the relevant and reliable information it needs. I would not try, in this presentation, to list what the more relevant information they can provide: it is enough to think on the kind of data these agencies produce – population estimates, employment statistics, data on inflation, national and regional production, and, in the case of IBGE in Brazil, environment and geographical information – to realize that their relevance is difficult to overestimate.